

# United States Patent and Trademark Office

ev

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,749	10/03/2001	Charles A. Miller	FORM 2209 (P139-US) 1647  EXAMINER	
7812 7:	590 01/27/2004			
SMITH-HILL AND BEDELL			DINH, TUAN T	
12670 N W BA	ARNES ROAD			<u> </u>
SUITE 104			ART UNIT	PAPER NUMBER
PORTLAND,	OR 97229		2827	,
			DATE MAILED: 01/27/200	4

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		09/970,749	MILLER, CHARLES A.			
		Examiner	Art Unit			
		Tuan T Dinh	2827			
The MAILIN Period for Reply	G DATE f this communication	appears on the cover she t with the	correspondence address			
THE MAILING DAT  - Extensions of time may after SIX (6) MONTHS f  - If the period for reply sp  - If NO period for reply is  - Failure to reply within th  - Any reply received by th	TE OF THIS COMMUNICATION  The available under the provisions of 37 CFI from the mailing date of this communication ecified above is less than thirty (30) days, a specified above, the maximum statutory per set or extended period for reply will, by statutory per set or extended period for reply will, by statutory per set or extended period for reply will, by statutory per set or extended period for reply will, by statutory per set or extended period for reply will, by statutory per set or extended period for reply will, by statutory per set or extended period for reply will, by statutory per set or extended period for reply will, by statutory per set or extended period for reply will, by statutory per set or extended period for reply will, by statutory per set or extended period for reply will.	R 1.136(a). In no event, however, may a reply be	timely filed lays will be considered timely. om the mailing date of this communication. NED (35 U.S.C. § 133).			
1) Responsive	o communication(s) filed on _	·				
2a) ☐ This action is	FINAL. 2b) 🖂 T	his action is non-final.				
3)☐ Since this ap closed in acc	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4a) Of the ab 5) ☐ Claim(s) 6) ☑ Claim(s) <u>21-</u> 7) ☑ Claim(s) <u>28-</u>	<ul> <li>✓ Claim(s) 1-38 is/are pending in the application.</li> <li>✓ 4a) Of the above claim(s) 1-20 and 32-38 is/are withdrawn from consideration.</li> <li>✓ Claim(s) is/are allowed.</li> <li>✓ Claim(s) 21-27 is/are rejected.</li> <li>✓ Claim(s) 28-31 is/are objected to.</li> <li>✓ Claim(s) are subject to restriction and/or election requirement.</li> </ul>					
Application Papers	•	•				
10) The drawing(s Applicant may Replacement	not request that any objection to drawing sheet(s) including the cor	niner.  accepted or b) objected to by the the drawing(s) be held in abeyance. So rection is required if the drawing(s) is a Examiner. Note the attached Office.	See 37 CFR 1.85(a). Objected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.		Examiner. Note the attached Offic	DE ACTION OF TOTAL PTO-152.			
12) Acknowledgr a) All b) S 1. Certifie 2. Certifie 3. Copies applica * See the attach 13) Acknowledgme since a specific 37 CFR 1.78. a) The trans 14) Acknowledgme	nent is made of a claim for fore some * c) None of: ed copies of the priority docume ed copies of the priority docume of the certified copies of the partion from the International Bursed detailed Office action for a ent is made of a claim for dome is reference was included in the slation of the foreign language ent is made of a claim for dome	ents have been received in Applica priority documents have been recei	ation No  ved in this National Stage  ved.  (e) (to a provisional application) or in an Application Data Sheet.  eceived.  20 and/or 121 since a specific			
Attachment(s)						
	Cited (PTO-892) 's Patent Drawing Review (PTO-948) Statement(s) (PTO-1449) Paper No(	5) Notice of Informal	ry (PTO-413) Paper No(s)  Patent Application (PTO-152)			

### **DETAILED ACTION**

Page 2

1. The request filed on October 14, 2003 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 09/970,749 is acceptable and a RCE has been established. An action on the RCE follows.

#### Information Disclosure Statement

2. The information disclosure statement (IDS) filed on 10/14/03 was filed is being considered by the examiner.

Applicant is submitted the inventor names in the US pattern portion, but without the US pattern numbers. Examiner suggests to the applicant providing the US pattern numbers, which are the same of the inventor names, listed in the IDS filed on 10/14/03.

Examiner is only considered the foreign pattern documents of the IDS filed on 10/14/03.

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2827

4. Claims 21-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Khandros et al. (U. S. patent 6,330,164).

As to claims 21 and 25, Khandros et al. disclose a system as shown in figures 2-4 comprising:

a substrate (PCB or substrate 10-figure 2, column 3, lines 24, 38) having conductors (terminal or pad 22, column 3, line 24) formed thereon,

a base IC die (12, column 3, line 18) having a first surface (a surface including bypass capacitor chip 11) facing the substrate (10) and a second surface (not including chip 14) parallel to the first surface (see figure 2),

a first secondary IC die (bypass capacitor chip 11, column 3, lines 32-33) residing between the first surface of the base IC (12) and the substrate (10) and linked to the first surface of the base IC die (11) through first conductive signal paths (23A, column 3, line 32), and

conductive contacts comprise resilient spring contacts (20, column 3, line 20) extending between the first surface of the base IC die (12) and the conductors (22) on the substrate (10) for conveying signals between the base IC die and the conductors on the substrate.

As to claim 22, Khandros et al. disclose the system as shown in figures 2-4 wherein solder (column 3, line 25) forms the first conductive signal paths (23A).

As to claims 23-24, Khandros et al. disclose the system as shown in figures 2-4 wherein the substrate (10) is a printed circuit board or semiconductor substrate (column 3, line 38).

Application/Control Number: 09/970,749

Art Unit: 2827

As to claim 26, Khandros et al. disclose the system in figures 2-4 wherein the contacts are formed on the first surface (see figure 2) of the base IC die (12) and soldered to the conductors (22) on the substrate (10), see column 3, lines 24-25.

As to claim 27, Khandros disclose the system in figures 2-4, and figure 11 wherein the contacts (21) formed on the first surface of the base IC die (12), and a spring contact socket (504-figure 11, column 13, lines 27-35) providing signals paths between the contacts and the conductors on the substrate.

# Allowable Subject Matter

5. Claims 28-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

# Response to Arguments

6. Applicant's arguments with respect to claims 21-31 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that the Hayashi reference does not teach and anticipate all of the limitations of the claims invention. Examiner will not address individually comments, and agrees the Hayashi reference doe not moot and anticipate claimed invention.

# **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T Dinh whose telephone number is 703-306-5856. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 703-308-1233. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0658.

Tuan Dinh

December 22, 2003.